Application No.: 10/560,268

Attorney Docket No.: 03528.0149.PCUS00

## THE AMENDMENTS

## In the Claims:

- 1-10. (Cancelled)
- 11. (Currently Amended) A method of gene therapy in a heart muscle tissue of a patient, comprising delivering to the heart muscle tissue of a patient an AAV-2 vector or an AAV particle having a capsid encoded by the AAV-2 vector, wherein the AAV-2 vector carries mutations in a heparin-binding motif of a capsid protein and causes a reduced or eliminated heparin binding function, wherein said mutations are R484E and R585E, wherein amino acids R484 and R585 belong to different capsid protein subunits.
- 12-15. (Cancelled)
- 16. (Previously Presented) The method of claim 11, wherein the capsid protein is VP1, VP2, or VP3.
- 17. (Previously Presented) The method of Claim 16, wherein the capsid protein is VP1.
- 18. (Previously Presented) The method of Claim 11, wherein the amino acid position is numbered according to the numbering based on VP1 protein.
- 19. (Cancelled)
- 20. (Previously Presented) The method of claim 11, wherein said delivering is systemic delivering.